UNITED NATIONS

TD

United Nations Conference on Trade and Development

Distr.
GENERAL

TD/B/COM.3/42
19 December 2001

Original: ENGLISH

TRADE AND DEVELOPMENT BOARD
Commission on Enterprise, Business Facilitation and Development
Sixth session
Geneva, 18-22 February 2002
Item 3 of the provisional agenda

# ELECTRONIC COMMERCE AND INTERNATIONAL TRANSPORT SERVICES: BEST PRACTICES FOR ENHANCING THE COMPETITIVENESS OF DEVELOPING COUNRIES

Note by the UNCTAD secretariat

## CONTENTS

| Chapter | | Page |
|---|---|---|
| | Introduction | 2 |
| I. | International transport services and development | 3 |
| II. | Policy questions for consideration by the Commission | 4 |
| III. | Proposals for the future work of UNCTAD | 8 |

GE.01-53482 LS
ENG

## INTRODUCTION

1. The Plan of Action adopted by UNCTAD X (TD/386) requested UNCTAD to undertake work on the implications for developing countries of the economic, social and legal aspects of electronic commerce, in particular issues of concern in transport and other related service sectors (para. 157). The Expert Meeting on Electronic Commerce and International Transport Services: Best Practices for Enhancing the Competitiveness of Developing Countries was held in response to that request. Experts discussed the impact of electronic commerce on international transport services, including economic, operational, legal and documentary aspects. Their deliberations resulted in the adoption of conclusions and recommendations agreed by all of them. They considered that the agreed recommendations reflected the central issues crucial for fostering electronic commerce, particularly in relation to international transport services.

2. The conclusions and recommendations of the Expert Meeting were sent to member States for comments. Four member States[1] provided comments, which are taken into account in this note. The purpose of this note is to assist the Commission in its consideration of the policy issues related to electronic commerce and international transport services that were examined by the experts. It is divided into three sections. The first section highlights the importance of transport services in development, including their interlinkage with information and communication technology. The second section focuses on specific policy issues requiring action at the national and international levels, while the third section presents possible areas of future work for UNCTAD.

[1] Colombia, Fiji, Niger and Tonga.

## Chapter I

## INTERNATIONAL TRANSPORT SERVICES AND DEVELOPMENT

3. The emergence of electronic commerce has important implications for transport. Businesses cannot take advantage of new ways of conducting commercial transactions if adequate transport infrastructure and services cannot be made available to bring the goods thus traded to the market. Many developing countries find themselves in a situation where the benefits of electronic commerce cannot be reaped because of a lack of access to adequate transport services and consequently a lack of ability to translate progress in the *new economy* into real benefits. Governments of developing countries need to ensure that their national transport connects seamlessly with international transport services. This requires the development and implementation of an integrated national transport plan that is supported by an up-to-date legal infrastructure. The implementation of the plan will require steps to improve efficiency and also investment in infrastructure, equipment and manpower with the participation of the private sector. Transport linked to information and communication technology can therefore be expected to be a crucial sector for development and one of the areas on which national and international activities must concentrate in order to ensure the sustainability of trade- and technology-based development processes.

## Chapter II

## POLICY QUESTIONS FOR CONSIDERATION BY THE COMMISSION

### A. Possible policy action at the national level

4. The last decades of the twentieth century witnessed the extraordinary growth in international economic relations and the new production and distribution methods that collectively are known as globalization. Globalization has dramatically altered the volume and pattern of the movement of goods, and increased demands on both international and national transport systems. Although transportation cannot claim exclusive responsibility for the success of economic globalization, it remains an essential factor that cannot be replaced. Developing countries, while still benefiting from lower labour costs and national resources, must rely more on access to international transportation and telecommunications, the quality of local infrastructure and a supportive policy in order to compete in the global market place. Without a policy to develop national collection, distribution and intermodal facilities developing nations will be unable to benefit from development offered by trade or attract investment by foreign firms. Consequently, considerable investments in transport and telecommunication infrastructure will need to be made to provide the quality of service required for international trade.

5. The ability of nations to make such investments will determine which countries are able to compete successfully. Governments are encouraged to implement policies to give priority to both public and private investment in transport and telecommunication infrastructure. Public–private sector partnerships whereby the Government provides funding for basic infrastructure and the private sector supplies superstructure and equipment are being used in a number of developing countries. Technical developments continue to make information and telecommunication infrastructure more affordable. Investment in the national telecommunication sector is required in order both to expand the network and to improve circuit capacity and bandwidth so as to reduce access prices. Private sector involvement should be encouraged. Since virtually all international shipments require the use of more than one mode of transport, Governments need to ensure that transport infrastructure development is coordinated and appropriate for national requirements.[2]

6. The use of large container ships working in global shipping alliances for the transport of manufactured goods will need expanded port facilities. This can lead to groups of countries establishing port development policies that will employ available resources most economically on a regional basis, for example by the development of a regional hub port. The development of regional rail networks with a common gauge is another method of reducing transport time and costs. Regional cooperation agreements along transit transport corridors are a means of streamlining procedures, focusing national and regional development along key links and attracting capital. The development of regional telecommunication infrastructure is a means of benefiting from economies of scale. A number of regional

[2] See para. 1 of the Agreed Conclusions and Recommendations, TD/B/COM.3/EM.12/L.1.

commissions noted at the Expert Meeting that Governments had concluded regional cooperation agreements, and Governments were urged to continue their policy of developing such agreements.[3]

7. A further policy question raised by the discussions was the issue of Governments giving consideration to adapting national laws and regulations to foster electronic commerce. Experts acknowledged that the application of the existing rules and regulations in an electronic environment could create obstacles to the development of e-commerce in general and in the transport sector in particular. The requirements for a "written", "signed" and "original" document arising from international conventions applicable to transport were considered to be a major impediment. Experts therefore reaffirmed the need for a legal framework that is supportive of, and conducive to, electronic commerce. This issue had been addressed and highlighted on a number of occasions within UNCTAD as well as in other international organizations. Indeed, the UNCTAD Expert Meeting on Capacity-Building in the Area of Electronic Commerce: Legal and Regulatory Dimensions, held in 1999,[4] urged Governments to examine their existing legal infrastructure and adapt it to the requirements of electronic commerce, and to prepare such new laws as might be necessary.

8. It emerged from the experts' discussions that a number of Governments had enacted, or were in the process of enacting, legislation to accommodate electronic commerce. References were made to the Model Law on Electronic Commerce (1996) and the Model Law on Electronic Signatures (2001) adopted by the United Nations Commission on International Trade Law (UNCITRAL), which provide internationally agreed guidelines and principles for national legislators in this respect.

9. In the light of these discussions, experts considered it necessary to further call upon Governments to take measures for streamlining and adapting their existing legal infrastructure to the requirements of electronic transactions. To promote uniformity of approach and avoid the emergence of diverse national laws, experts encouraged Governments, in adapting their legal infrastructure, to give consideration to the existing international rules and guidelines, such as the UNCITRAL Model Laws.[5]

10. It should be recalled that the existing international conventions applicable to maritime transport, such as the Hague and Hague-Visby Rules, mainly apply to documents and thus prevent the use of electronic means of communications. On the other hand, international conventions governing air and rail transport were revised in 1999[6] to permit the use of electronic messages to replace traditional transport documents. Thus, recognizing the negative implications for transport providers and users of failure to comply with the requirements of applicable international conventions, experts encouraged Governments "to

---

[3] Ibid., para. 2.
[4] See the Agreed Conclusions and Recommendations of the Expert Meeting, TD/B/COM.3/EM.8/3.
[5] See paras. 3 and 4 of the Agreed Conclusions and Recommendations, TD/B/COM.3/EM.12/L.1.
[6] See the Montreal Convention (1999) on air carriage and the Convention on rail carriage (1999).

give consideration to adopting the existing international transport treaties that allow the use of electronic transport documents".[7]

11. Experts agreed that administrative regulations and practices related to the movement of goods could be simplified to reduce transport delays and facilitate the use of information and communication technology.[8] In particular, a policy to reform customs procedures and use information technology can speed up customs clearance. Creation of a trade and transport facilitation body is another means used to bring the various parties together to analyse existing national procedures and reform them on the basis of international recommendations and standards.

12. Containerization has increased the productivity of ports and ships and thus speeded up the flow of goods. However, cargo moving through ports can be delayed because of missing or insufficient information that prevents the planning of operations and the rapid clearance of cargo. The use of information and communication technology will reduce both the time for information exchange and the number of errors due to multiple transcriptions of data. The development of a port community information system has been the goal of many ports as a means of improving the accuracy and flow of information. In a number of ports, the relevant departments (customs administration and port authority) and the business community have established joint companies to develop, install and operate such systems. For many companies, the primary objective was to create an interface with customs. Subsequently, they expanded their functionality to send and receive other messages, often via the Internet.

13. Governments can adopt a policy to promote and partially fund the development of a computerized port community system to make ports more efficient and speed up the flow of goods.[9] The system would allow the various actors involved in the movement of goods to exchange information electronically, via both electronic data interchange and the Internet. The advantage of the community system is that all authorized partners have access to the same information, which can be updated before the goods arrive and then as they move through the port area. The two key parties are the port authority and the customs administration, both government organizations. The development of such systems should make full use of standard messages so that information can also be exchanged internationally. To promote use of the system, Governments should develop systems that require traders to use the Internet for the filing of documents required for international trade and transport.

14. Where appropriate, Governments should introduce a policy to liberalize market access conditions for telecommunication service providers, in particular for Internet service providers.[10] Countries with larger numbers of the latter generally have lower Internet charges than countries with a smaller number. In general, it has been observed that whenever competition has been introduced into the market, prices have dropped and the quality of

---

[7] See para. 5 of the Agreed Conclusions and Recommendations, TD/B/COM.3/EM.12/L.1.
[8] Ibid., para. 6.
[9] Ibid., para. 8.
[10] Ibid., paras. 9 and 10.

service has improved. This is particularly important for allowing the general public to have access to the service.

15. In addition to the need for transportation and communication infrastructure, the experts stressed the importance of Governments and enterprises in promoting public awareness of and education in all aspects of electronic commerce and the opportunities and benefits it offers.[11] A policy to provide this training in the educational system and through classes for adults is a proven method to overcome any shortcoming in this respect. Each country needs to implement the scheme that is best suited to its requirements, but the Government has a key role to play.

### B. Possible policy action at the international level

16. Experts agreed that the international community could play an important role in improving the competitiveness of developing countries' trade and transport operations. International organizations involved in electronic commerce and transport were therefore called upon to cooperate and coordinate their activities in this context. They were also encouraged to strengthen their legislative, technical and financial assistance to developing countries in the following areas:

(a) Reviewing and adapting national laws and regulations;

(b) Promoting awareness, and providing education and training;

(c) Developing transport and telecommunications infrastructures;

(d) Strengthening transport and telecommunications service providers.

17. In addition, a member State proposed in subsequent comments that international organizations also assist developing countries in strengthening their information technology infrastructure.

[11] Ibid., para. 11.

## Chapter III

## PROPOSALS FOR THE FUTURE WORK OF UNCTAD

18. The recommendations of the Expert Meeting addressed to UNCTAD provide direction as to its future work in this field. They reaffirm the need for regular review and monitoring of developments relating to economic, commercial and legal aspects of electronic commerce and international transport services, including analysis of their implications for developing countries.[12] A subsequent comment from a member State proposed that UNCTAD monitor the progress of Governments in adapting their legal infrastructure to the requirements of electronic commerce, in adopting international transport treaties allowing the use of electronic transport documents and in promoting public awareness of the use of electronic commerce.[13] This could be carried out through UNCTAD's recurrent publications and specific studies.

19. Experts discussed the role of transport documents, particularly bills of lading, in international trade and the possibilities for their replacement by electronic alternatives. The functions of the bill of lading as a receipt for goods, evidence of contract and a document of title were highlighted. The document of title function of the bill of lading has made it a key document in international trade, enabling the sale of goods between parties located in different parts of the world. Being a document of title, the bill of lading represents the goods and the transfer of rights in the goods can be effected by transfer, or endorsement, of the bill of lading. The bill of lading can therefore be transferred many times during the voyage without the knowledge of the shipowner. To enable delivery of the goods to the rightful owner by the shipowner, original bills of lading have to be presented at the port of destination.

20. Problems arise from the fact that modern transport technologies have resulted in accelerated arrival of the goods at the port of destination, but not of the documents. The late arrival of the bills of lading results in extra costs and liability arising from delivery of the goods without production of the original bill of lading or delivery against "letters of indemnity". Thus, while the document of title character of the bill of lading has made it an important document in international trade, it has also caused the most difficulties and will continue to cause difficulties in relation to the replacement of bills of lading by electronic alternatives.

21. The difficulties arising from the use of bills of lading have resulted in calls for the use of non-negotiable transport documents such as sea waybills. Although sea waybills function as a receipt for the goods and evidence of contract, they are not documents of title and do not need to be presented to the carrier at the port of destination against delivery of the goods.

---

[12] Ibid., para. 17.
[13] Ibid., paras. 3, 4, 5 and 11.

22. There have been repeated calls by the international community[14] for wider use of sea waybills whenever there is no intention to transfer ownership of the goods while they are in transit. It emerged from the discussions at the Expert Meeting that negotiable bills of lading are used even in trade where no negotiable transport document is required.

23. Furthermore, in the context of electronic commerce, it is the negotiability aspect of the bill of lading that constitutes a major obstacle in establishing an electronic alternative. Under the existing rules and regulations legal rights are attached to the physical possession of paper documents. Thus, the so-called electronic bill of lading is not considered a document of title.[15] The wider use of non-negotiable transport documents will therefore greatly facilitate transition to an electronic environment.

24. In view of this, experts encouraged commercial parties to revise their commercial practices with respect to the use of traditional negotiable documents,[16] and they considered that the preparation of a study by UNCTAD would be necessary for ascertaining the current situation. As indicated by the experts,[17] UNCTAD could study the extent to which negotiable transport documents such as bills of lading are necessary for modern-day international trade and to what extent they can be replaced by non-negotiable transport documents such as sea waybills and by electronic alternatives.

25. In discussing the legal issues and uncertainties arising from the use of electronic means of communications in international trade and transport, experts noted that a number of Governments had enacted, or were in the process of enacting, legislation to provide a supportive and favourable legal environment for the development of electronic commerce. The work of UNCITRAL in the preparation of the Model Law on Electronic Commerce (1996) and the Model Law on Electronic Signatures (2001) aimed at providing guidelines to enacting States was highlighted. It was recalled that the future work of UNCITRAL included the preparation of an international instrument to overcome legal obstacles arising from the application of the existing international conventions governing international trade and transport.

26. The experts considered that pending the establishment of the necessary legal framework, the contractual rules and arrangements of the parties could play an important role in providing solutions to, or complementing the laws and regulations in addressing, some of the legal uncertainties. It was recognized that not all legal obstacles could be overcome by contractual arrangements. For example where legal requirements for "written", "signed" or "original" documents arise from a law or an international convention, contractual arrangements will have no effect. UNCTAD was therefore requested to carry out research into the nature of, and the extent to which, the contractual agreements of the parties can be

---

[14] See the recommendations by the United Nations Economic Commission for Europe, "Measures to facilitate maritime transport documents procedures", No. 12/Rev.1; www.unece.org/cefact/rec/rec12en.htm.

[15] For more detailed information, see "Electronic commerce and international transport services", TD/B/COM.3/EM.12/2, part II, Legal and Documentary Aspects, paras. 30-50.

[16] See para. 12 of the Agreed Conclusions and Recommendations, TD/B/COM.3/EM.12/L.1.

[17] Ibid., para. 18.

used as a solution to facilitate wider use of electronic commerce in international transport services.[18]

27. Experts again stressed the importance of human resource development and called upon UNCTAD to develop and deliver training materials and disseminate information on the latest developments in the field of electronic commerce and international transport services.[19] Development should be demand-based, resulting from requests from developing countries, and should be carried out in close collaboration with private operators.

28. UNCTAD was also requested to assist developing countries in the conceptual design of port community information systems,[20] a number of which have been developed in both developed and developing countries. Although such systems are international in nature, there has been a tendency to develop standard national messages for the exchange of information. The secretariat could collect information on these systems, including how they have been set up and organized, how they are funded, what information is exchanged, what standards have been used, what agreements have been drawn up and what are the core applications. The experience gained by the secretariat in its technical assistance programmes for transport information and customs systems would provide valuable inputs to this study. On the basis of an analyses of this information, guidelines could be prepared that would facilitate the design and implementation of a port community information system. This would result in an approach that maximizes the use of existing international standard messages.

29. Finally, the experts expressed their opinion that reconvening the Expert Meeting on a regular basis would provide a forum in which developing countries could benefit from a dialogue on best practices in electronic commerce and international transport service.[21] This would allow progress on the agreed recommendations to be monitored and thus provide a mechanism for follow-up.

---

[18] Ibid., para. 19.
[19] Ibid., para. 20.
[20] Ibid., para. 21.
[21] Ibid., para. 22.